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(54) Title: CHROME-FREE PASSIVATING SOLUTION

(54) 发明名称: 无铬钝化液

(57) Abstract: The present invention relates to a chrome-free passivating solution, which has the following components: effective amount of oxysalts of transition metals, inorganic acids and water. Said oxysalts of transition metals are selected from a group of oxysalts containing titanium, oxysalts containing zirconium, oxysalts containing hafnium, oxysalts containing vanadium, oxysalts containing niobium, oxysalts containing tantalum, oxysalts containing molybdenum, oxysalts containing tungsten, oxysalts containing manganese, oxysalts containing technetium, and oxysalts containing rhenium, and the ratio between said oxysalts of transition metals and inorganic acids is in the range of 200-400:1. Further, said chrome-free passivating solution may comprise one or more complexing agents. The problem that noxious chrome of sexavalence and trivalence is present in the galvanizing coat and passivating solution of the prior art is solved substantially by the passivating solution of the present invention, and the said passivating solution of the present invention can replace really the passivating solution containing sexavalence and trivalence chrome of prior art, to complete the passivation of electrogalvanized and hot galvanizing coat.

(57) 摘要

本发明提供了一种无铬钝化液, 该无铬钝化液含有以下成分: 钝化有效量的含有过渡元素的含氧盐、无机酸及水; 所述含有过渡元素的含氧盐为选自含有钛的含氧盐、含有锆的含氧盐、含有铪的含氧盐、含有钒的含氧盐、含有铌的含氧盐、含有钽的含氧盐、含有钨的含氧盐、含有钼的含氧盐、含有锰的含氧盐、含有锝的含氧盐和含有铼的含氧盐; 所述含有过渡金属的盐与无机酸的重量比为 200-400:1。所述无铬钝化液还可以含有一种或多种络合剂。本发明提供的无铬钝化液可以从根本上解决了现有的产品镀锌层及钝化液中含有有毒有害的六价铬和三价铬元素的问题, 并可真正替代现有的含有六价铬和三价铬的铬酸盐钝化液, 实现对电镀锌层和热镀锌层的钝化。

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